

ABSTRACT OF THE DISCLOSURE

A first aspect of the present invention relates to a method for low-
5 frequency emphasizing the spectrum of a sound signal transformed in a
frequency domain and comprising transform coefficients grouped in a number of
blocks, in which a maximum energy for one block is calculated and a position
index of the block with maximum energy is determined, a factor is calculated for
each block having a position index smaller than the position index of the block
10 with maximum energy the calculated maximum energy and the energy of the
block, and, for each block, a gain determining from the factor is applied to the
transform coefficients of the block. Another aspect of the invention is concerned
with an HF coding method for coding, through a bandwidth extension scheme,
an HF signal obtained from separation of a full-bandwidth sound signal into the
15 HF signal and a LF signal, in which an estimation of the an HF gain is calculated
from LPC coefficients, the energy of the HF signal is calculated, the LF signal is
processed to produce a synthesized version of the HF signal, the energy of the
synthesized version of the HF signal is calculated, a ratio between the energy of
the HF signal and the energy of the synthesized version of the HF signal is
20 calculated and expressing as an HF gain, and a difference between the
estimation of the HF gain and the HF gain is calculated to obtain a gain
correction. A third aspect of the invention is concerned with a method for
producing from a decoded target signal an overlap-add target signal in a current
frame coded according to a first coding mode. According to this method, the
25 decoded target signal of the current frame is windowed and a left portion of the
window is skipped. A zero-input response of a weighting filter of the previous
frame coded according to a second coding mode is calculated and windowed so
that the zero-input response has an amplitude monotonically decreasing to zero
after a predetermined time period. Finally, the calculated zero-input response is
30 added to the decoded target signal to reconstruct the overlap-add target signal.